



Snake River Chapter INTERNATIONAL CODE COUNCIL

125 N Bridge St., St. Anthony, Idaho 83445

Phone: 208-624-4643

May 26, 2009

Kelly Pearce, Administrator
Idaho Division of Building Safety
1090 E Watertower St.
Meridian, Idaho 83642

RE: Proposed amendment to the *2009 International Residential Code*

Dear Mr. Pearce;

The Snake River Chapter of ICC met on May 21, 2009 and voted to recommend the following code changes to the *2009 International Codes*, we respectfully submit the following code change proposal to the *2009 International Residential Code*:

R109.1.3 Floodplain inspections. For construction in areas prone to flooding as established by Table R301.2(1), upon placement of the lowest floor, including *basement*, ~~and prior to further vertical construction,~~ the building official shall be authorized to require submission of documentation, ~~prepared and sealed by a registered design professional,~~ of the elevation of the lowest floor, including *basement*, required in Section R322.

R322.1.10 As-built elevation documentation. ~~A registered design professional shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3.~~

R322.2.2 Enclosed area below design flood elevation. Enclosed areas, including crawl spaces, that are below the design flood elevation shall:

1. Be used solely for parking of vehicles, building access or storage.
2. Be provided with flood openings that meet the following criteria:
 - 2.1. There shall be a minimum of two openings on different sides of each enclosed area; if a building has more than one enclosed area below the design flood elevation, each area shall have openings on exterior walls.
 - 2.2. The total net area of all openings shall be at least 1 square inch (645 mm²) for each square foot (0.093 m²) of enclosed area, or the opening shall be designed and the *construction documents* shall include a statement ~~by a registered design professional~~ that the design and installation of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing the automatic entry and exit of floodwaters ~~as specified in Section 2.6.2.2 of ASCE 24.~~

1

Reasoning:

R109.1.3, R322.1.10 These code provisions are more restrictive than NFIP or FEMA requirements. They require a RDP survey the project at specific times and do not give non RDP options for A and AO Zones as provided for in the local floodplain regulations. This type of regulation should be in the local floodplain ordinance if needed and not in the IRC.

R322.2.2 The proponent for this code change (RB98-07/08) was from 'Smart Vent, Inc.' and now on their website (www.smartvent.com) is promoting their \$180.00 plus vent as "the only vent certified to meet the requirements..." The ICC Committee disapproved the original code change stating "that they saw insufficient justification to support this change" preferring "the existing prescriptive solution already offered in ASCE24." We concur with the ICC Committee.

We would appreciate your consideration of these items and the code change proposed by Paul Aston of IDABO (deletion of Section R313.2). If you have any questions please call me at (208) 782-3179.

Sincerely,

Allen Jensen

Code Committee Chairman

2



IDAHO ASSOCIATION OF BUILDING OFFICIALS

P.O. Box 8224
Boise, Idaho 83707-2224
(208) 321-9182

May 26, 2009

Kelly Pearce, Administrator
Idaho Division of Building Safety
1090 E Watertower St.
Meridian, Idaho 83642

RE: Proposed amendment to the 2009 International Residential Code

Dear Mr. Pearce;

I direct this letter to you in my capacity as Chairman of the IDABO Code Development Committee and as a member of the IDABO Board of Directors. With the passing of HB 220 and now that the Building Board has authority to amend the International Codes and in accordance with the sentiment of most the stake holders in the construction and design trades and local jurisdictions, we respectfully submit the following code change proposal to the International Residential Code:

SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in *townhouses*.

Exception: An automatic residential fire sprinkler system shall not be required when *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904.

~~**R313.2 One and two family dwellings automatic fire systems.** Effective January 1, 2011, an automatic residential fire sprinkler system shall be installed in one and two family dwellings.~~

This in effect will eliminate the requirement for automatic sprinklers in one and two family dwellings from the 2009 International Residential Code. IDABO actively opposed these changes on the national level and at the present time feel it was premature for such amendments. Even though we generally support the wide spread use of fire sprinklers we are opposed to this particular requirement for various reasons with some listed as follows:

- The added cost to the residence – the cost can easily approach \$2.00 per square foot and sometimes in excess of \$3.00 per square foot.
- The proponents of the change always mentioned the deaths that happen in residences without identifying how many were in old homes vs. our newer homes with smoke detectors and other life safety features.
- This requirement would not apply to manufactured homes constructed under HUD standards until HUD also includes it in the manufactured home standards.
- In rural areas it is very difficult to comply with the sprinkler standards, such as NFPA 13D unless there is a municipal or central water system available.
- Even though residential fire sprinklers are much simpler systems, law requires that the systems be installed by a licensed installer and prohibits the homeowner or a plumber to install the systems which also adds to the cost.

In summary we feel the time is not yet right for this particular requirement and in some situations it will force a choice in affordable housing of whether to build or not to build because of the added cost. Sometime in the future the applicable standards may change, the industry may evolve and other laws may adapt to make sprinkling of one and two family dwellings more feasible and cost effective. Until such time IDABO will most likely continue to oppose the inclusion of these requirements.

We would appreciate your consideration of this item at the public hearing scheduled to consider these topics. If you have any questions please call.

Sincerely,

Paul Aston, C.B.O.
Director of Community Development
Minidoka County

P.O. Box 368
715 G Street
Rupert, Idaho 83350

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4

**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Residential Code (IRC)**

Issue: Automatic Fire Sprinkler System

2009 IRC Section R313

Recommended Amendment

Delete the Section in its entirety as shown below:

~~R313 AUTOMATIC FIRE SPRINKLER SYSTEMS~~

~~R313.1 Townhouse automatic fire sprinkler systems.~~ ~~An automatic residential fire sprinkler system shall be installed in townhouses.~~

~~Exception:~~ ~~An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.~~

~~R313.1.1 Design and installation.~~ ~~Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904.~~

~~R313.2 One- and two-family dwellings automatic fire sprinkler systems.~~ ~~Effective January 1, 2011, an automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.~~

~~Exception:~~ ~~An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential fire sprinkler system.~~

~~R313.2.1 Design and installation.~~ ~~Automatic residential fire sprinkler systems shall be installed in accordance with Section P2904 or NFPA 13D.~~

Reason:

The purpose of this amendment is to delete the reference of the mandatory requirement of residential sprinkler systems in all one- and two- family dwellings and townhouses. This change will provide the homeowner with the continued ability to choose whether or not a residential fire sprinkler system is appropriate for their situation.

NAHB strongly disagrees with the fire services perception of America's fire problem and the proposed solution to reduce the number of fire fatalities that occur each year. In 1977, less than 0.008% of the housing market was affected by structure fires. In 2005, that number was reduced to less than 0.002%. Over the past three decades, there has a substantial decrease in the number of residential structure fires in relation to the growth

of American housing. No one can predict when or where a fire will occur, but to require every home to be equipped with a residential sprinkler system based on the figures below is not cost-effective.

Consideration as to whether the requirement for fire sprinklers in dwellings be mandatory should remain a local issue. The sole purpose of an Appendix P in the 2006 International Code was to provide local jurisdictions with the means to adopt a code or standard that is applicable to their community. Not every jurisdiction agrees that radon resistant construction, patio coverings, and safety inspections of existing appliances need to be regulated or inspected in their jurisdiction. Contrary to the belief of some activists, several jurisdictions have decided that Appendix P (the provisions for residential sprinkler systems) is not applicable to their state or local jurisdictions. Of the 47 states that have adopted the International Residential Code, none have adopted the 2006 IRC with the inclusion of Appendix P. During the adoption process in six states, there was a proposal put forth to include appendix P in the formal adoption of the 2006 IRC and the proposal was voted down every time.

According to the U.S. fire administration more than half states in America are below the national fire death rate of 13.6 per million and over the past ten years the number of one- and two- family dwelling fires, deaths and injuries have fallen (6%, 18% and 26% respectively).

While the fire service and sprinkler advocates acknowledge that the median age of a home is 32 years, the connection between fire deaths and the age of the home is elusive. For several years data has been collected for several relevant facts about fires. The cause of the fire, whether smoke alarms were present and were working, type of smoke alarm present, whether the fire was confined and did not activate the sprinkler system.

While there have been no studies conducted to investigate whether fire fatalities are less likely to occur in newer homes, there is supporting evidence of this in reports issued by NFPA regarding the performance of smoke alarms. According to these reports, there is a significant difference in the number of fatalities and the number of fires when the smoke alarm present. This includes information regarding smoke alarms that were either battery operated, hardwired with battery backup or hardwired. According to April 2007 Report "U.S. Experience with Smoke Alarms and other Fire Detection/Alarm Equipment" by Marty Ahrens, 65% of the reported residential home fire deaths occurred in homes where there was no smoke alarm present (43%) or did not operate (22%). Of the 35% fire fatalities that occurred when a smoke alarm was present and operated, it was reported that two-thirds of the non-confined home structure fires occurred in dwellings with battery operated smoke alarms with the remaining third evenly divided between homes with hardwired and hardwired with battery backup.

6

Source	Code Cycle Required	# of Fires	# of Fatalities	# of Injuries	Property Damage in Millions
Battery only	Before 1982	88,300	1,230	5,850	\$2,353
Hardwired Only	1982-1992	19,900	170	1,300	\$743
Hardwire/Battery	1992- Present	18,000	210	1,490	\$568

Reference: April 2007 Report "U.S. Experience with Smoke Alarms and other Fire Detection/Alarm Equipment" by Marty Ahrens

From this information we can see that as the requirements for smoke alarms changed, as well as other requirements over the years, that the newer stock has had fewer fires and fewer fire fatalities. Along with improvements to the power source, the *National Fire Code* has also increased the number of required smoke alarms in a one- and two- family dwelling over the years. In 1992 it required that all smoke alarms be interconnected.

When you consider the advances made in the requirements of smoke alarms and look at the results in reducing the number of fire fatalities, the solution is educating the public about the importance of working smoke alarms and practicing proper fire prevention.

The most cost-effective means of reducing the loss life is through increasing the public's awareness on the use and maintenance of smoke alarms. According to NFPA reports an estimated 890 live could be saved annually if home were equipped with working smoke alarms. 65% of the reported fire fatalities from 2000-2004 occurred in homes where smoke alarms were either not present or were present but failed to operate. CPSC surveys have shown that while 88% of the households screened had at least one smoke alarm, 72% of these smoke alarms were battery powered only.

Staff Contact: Steve Orlowski - sorlowski@nahb.com 1-800-368-5242, ext. 8303



Heart of the Arts

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PALOUSE

Knowledge Corridor

May 27, 2009

Kelly Pearce, Administrator
Idaho Division of Building Safety
1090 E Watertower St.
Meridian, Idaho 83642

RE: Proposed Amendment to the 2009 International Residential Code

Dear Mr. Pearce:

As Building Official of the City of Moscow, in consultation with John Smith, Building Official of the City of Lewiston, I am respectfully submitting this proposal to you for consideration by the Building Code Board.

Specific code considered for amendment: 2009 International Residential Code

Section: R-302.2 Townhouses. Each *townhouse* shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 1-hour or 2-hour fire-resistance rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

Reason for change:

This proposed change restores the possibility of using the 2-hour wall separating townhouses, which is a fire-life safety requirement that increases the general safety in townhouse style buildings. Insurance for such separated housing is less costly to the inhabitants and provides greater safety.

8



Section: R-302.4, Table R302.1 Exterior Walls

{For clarity, only the line affected is noted here "Penetrations".}

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Penetrations	All	Comply with Section R317.3 <u>R302.4</u>	< 5 feet

Reason for change:

The code referenced in the table [R317.3] appears to be in error. The change references the correct code section.

Section R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in *townhouses*.

Exception: An automatic residential fire sprinkler system shall not be required *townhouses where a 2-hour fire-resistance-rated wall is installed between dwelling units or when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.*

R313.1.1 Design and installation. Where required. ~~A~~ automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904.

Reason for Change:

With the restoration of the 2-hour separation between dwelling units in townhouses, the requirement for sprinklers can be eliminated, thereby eliminating higher construction costs, while at the same time providing a high level of safety, and some savings for the inhabitants when insurance premiums do not rise to cover water damage. In the event that builders choose to install sprinklers instead of the 2-hour separation wall, the required sprinkler system needs to be designed and installed per Section P2904.

In general, fire flow is not always attainable or affordable, with some quotes in our local region as high as \$5-\$7 per square foot due to a lack of suppliers, installers, and materials.

The degree of safety is enhanced with the 2-hour separation wall that was formerly required in the IRC [2006]. In these economically difficult times,



safety should not be compared to dollars, however, enhanced safety via traditional means should not be overlooked.

One other concern is the 13D sprinkler system that is called out does not require testing before certificate of occupancy, does not require maintenance or annual testing, and has been known to fail causing fatalities.

Thank you for your consideration,

Carol Alexander, CBO
Building Official

CC: John Smith, City of Lewiston
IDABO
Patrick Grace, Deputy AG

State of Idaho Building Code Board Building Code Change Submittal

Date: 5/27/09

Proponent: Meridian Fire Department
(Jurisdiction, Chapter, Company, Association, Organization, etc)

Name: Joseph Silva, Fire Marshal

Address: 33 E. Broadway Ave. Suite 204

Email: JSilva@Meridiancity.org

Phone #: 208-888-1234

Support for adopting the IBC as printed:
2009 IBC Section: 903.2.8 Page: 185 Support the requirement in the IBC requiring automatic sprinkler systems to be installed in accordance with Section 903.3 to be provided throughout all buildings with a Group R fire area in 3 & 4 unit apartment buildings.

The majority of Cities in the State have chosen to adopt the code as written requiring fire sprinklers in 3 & 4 plex units. The systems are required to meet NFPA 13 R installation standards. These systems are placed in buildings to preserve means of egress for the occupants. The occupants of 3 & 4 plex units do not have any control or interest in the construction of these buildings or the neighbors activities which could place their life or property at risk. These tenants can often times can be seniors who have a more difficult time evacuating their unit quickly and who are most at risk of loss of life from fire. Or low income residents who are single parent households with latchkey children who start fires while attempting to cook. Low income residents also have a more difficult time recovering from the economic loss of a fire because they do not have the money to insure contents. Requiring fire sprinklers in 3 & 4 unit apartment protects residents in smaller communities that may not have full-time staff on their fire department and are more reliant on volunteer firefighters that must first respond to the station then to the fire resulting in greater risk to life.

11

State of Idaho Building Code Board Building Code Change Submittal

Date: 5/27/09

Proponent: Idaho Fire Chiefs Association, Inc.
(Jurisdiction, Chapter, Company, Association, Organization, etc)

Name: Dean Ellis, President / Doug Brown, V.P. of Operations

Address: 310 S. 7th Ave. Caldwell, ID 83605

Email: dellis@ci.idaho-falls.id.us / ddbrown05@msn.com

Phone: 208-612-8495 / 208-455-0344

Justification: The Idaho Fire Chiefs Association (IFCA) supports the State Building Code Board (SBCB) adopting the 2009 edition of the International Building Code (IBC) without any amendments, thus keeping it intact and whole, as issued by the ICC following the consensus based code adoption process.

Specifically, the IFCA supports the 2009 IBC, Section 903.2.8, Page 185, regarding the requirement that automatic fire sprinkler systems be installed in accordance with Section 903.3 and that they be provided throughout all buildings with a Group R fire area in which there are three (3) or more attached and adjoining units.

The majority of the more populated cities in Idaho have previously chosen (with the 2003 and 2006 editions of the IBC) to adopt the code "as written." One reason for this is because the I-Codes are considered to be "minimum" codes. To amend these codes and make them less restrictive means dropping below accepted and legally recognized *minimum* standards. That potentially exposes these jurisdictions to risk and liability, especially if the reason for the amendment is not justified and substantiated with scientific evidence or proof to support its removal. This is especially true of life safety appliances, which residential fire sprinklers are considered to be.

Whenever a portion of the IBC is amended to less than minimum there are usually one or more "tradeoffs" that have already taken place. To simply remove a requirement (i.e. fire sprinklers) through an amendment and to not reinstate any tradeoffs (like thicker sheetrock) that were allowed because of the fire sprinkler system, makes the building even more unsafe and hazardous to its occupants and to firefighters.

If the IBC is left intact and whole, as issued by the ICC, and then adopted as statute, there is no issue of liability for "lessening" a minimum code.

12

Idaho Building Contractors Association

6206 N. Discovery Way Ste. A, Boise, Idaho 83713

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May 27, 2009

MAY 27 2009

Mr. Kelly Pearce
Idaho State Division of Building Safety
1090 East Watertower Street
Meridian, Idaho 83642

RE: Adoption of 2009 International Residential Code

Dear Mr. Pearce:

The Legislative Committee for the Idaho Building Contractors Association met at its regular Spring Board meeting on May 7, 2009. After discussion regarding HB218 that passed the Idaho Legislature this year and the requirements in the 2009 IRC which would still mandate fire sprinklers in three and four-plexes, a motion was made and passed unanimously to request that the 2009 IRC be amended to remove said requirement for sprinkling of three and four-plexes at the State level.

This is consistent with past State regulation and would still allow local jurisdictions to adopt more stringent sprinkler requirements under the HB220.

Thank you for your consideration of this request. We anticipate a more detailed position at the upcoming hearings.

Yours truly,



Roy Ellis, President
Idaho Building Contractors Association



13

**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Residential Code (IRC)**

Issue: Stair Geometry (8 1/4" x 9")

2009 IRC Sections: R311.7.4.1 and R311.7.4.2

Recommended Amendment:

Modify the Section as shown below (Delete text, add new text)

R311.7.4.1 Riser height. The maximum riser height shall be 8 1/4 inches (210 mm) ~~7 3/4 inches (196 mm)~~. The riser shall be measured... (no further change)

R311.7.4.2 Tread depth. The minimum tread depth shall be 9 inches (229 mm) ~~10 inches (254 mm)~~. The tread depth shall be measured... (no further change)

Reason:

The purpose of this amendment is to retain the stair geometry requirements to those that have historically been allowed under the Building Officials and Code Administrators National Building Code (BOCA). This amendment will allow for the continued use of the 8 1/4" x 9" geometry, which is also the historically accepted requirement of many other state and local jurisdictions across the country. Many others actually adopt stair geometry requirements of 8 1/4" x 9."

These dimensions, originally accepted in the First Draft of the International Residential Code (IRC) and the historic dimensions in the Council of American Building Official's CABO One- and Two-family Building Code, adequately provide for stair safety in residential occupancies.

The 8 1/4" x 9" geometry has always adequately provided for occupant safety in residential occupancies. No sound documentation or data has ever been presented demonstrating that the 8 1/4" x 9" geometry is any less safe than a stair geometry of 7 3/4" x 10" or other even more stringent geometries. More specifically, there is no sound data showing or otherwise indicating a stair geometry of 8 1/4" x 9" is a contributing factor in accidental residential falls anymore than a stair geometry of 7 3/4" x 10" or any other stair geometry that has been proposed.

The safety benefits of the 7 3/4" riser and 10" tread stair geometry are technically unsubstantiated and are not practical in many home designs. If the footprint of the house must be increased to accommodate the additional space needed for 7 3/4" x 10" vs. an 8 1/4" x 9" geometry, adequately sized living spaces are sacrificed without any demonstrated gain. This can lead to an economic hardship upon first-time homebuyers of smaller homes, and in particular for construction on smaller lots, in-fill projects, and

townhomes.

As outlined in Section R101.3 of the IRC, the purpose the requirements in the code are to provide *minimum* requirements for occupant safety and health. There is adequate substantiation to show that 8¼" x 9" geometry provides this minimum level of occupant safety.

Notes/additional background: (

Prior to the Building Officials and Code Administrators 1996 BOCA National Building Code, and the 1995 CABO One-and-Two Family Building Code, stair geometry requirements were set at the 8¼" x 9" dimensions.

An alternative amendment is available for jurisdictions that wish to retain the use of past UBC requirements of an 8-inch maximum riser height and 9-inch minimum tread depth. For that amendment, please see suggested amendment "Stair Geometry (8" X 9)".

NAHB Policy on Stair Geometry Standards states: NAHB's Board of Directors recommends that all state and local governments which adopt the National Building Code (BOCA) and the Council of American Building Officials (CABO) model building codes, postpone the adoption of any new stair geometry. Also, NAHB's Board of Directors calls on all state and local governments that automatically adopt BOCA and CABO model building codes to amend the 1996 and 1995 editions respectively to continue the use of the 1993 BOCA and CABO model codes as they relate to stair geometry provisions. Also, NAHB's Board of Directors urges all state and local affiliated Home Builders Associations to contact state and local code authorities and persuade them to postpone the adoption of the new CABO and BOCA stair geometry standard. Also, NAHB's Board of Directors calls on NAHB to continue to vigorously pursue the adoption of a stair geometry standard consistent with the 1993 BOCA Code.

Staff Contact: Steve Orlowski - sorlowski@nahb.com 1-800-368-5242, ext. 8303

**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Residential Code (IRC)**

Issue: Guardrails

2009 IRC Section: R312.1

Recommended Amendment:

Modify the Section as shown below (Delete text)

R312.1 (Supp) Where required. Guards shall be located along open-sided walking surfaces of all decks, porches, balconies, ~~including stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below, at any point within 36 inches (914 mm) horizontally to the edge of the open side~~ Insect screening shall not be considered as a guard.

Reason:

The purpose of this amendment is to retain the provisions of the 2006 International Residential Code (IRC), where guardrails were required when the elevation difference between the walking surface was greater than 30 inches to the floor or grade directly below. The 2009 IRC now requires a guardrail where the elevation difference is greater than 30 inches from the walking surface to a horizontal point 36 inches adjacent to the leading edge of the walking surface to the grade or floor below. This change will now require the building official to carry a four foot level to conduct inspections.

During the 2007/2008 Code Development Cycle, the proponent referred to work conducted and reports written by the International Code Council's Code Technology Committee (CTC). Though, at no time during the Public Hearing, nor the Final Action Hearing, was any technical justification presented to substantiate the change requiring the building official to measure thirty-six inches away from the leading edge of the walking surface or tread to determine when a guardrail should or should not be required. After reviewing the many reports from the CTC website, it is still unclear from where the thirty-six inch requirement was derived. Currently there are no studies that can support the claims made that this will have an effect on reducing possible injuries. While the proponent promotes this as a means for consistent enforcement of the guard requirements, there was no evidence that showed an increased risk to the safety of the occupant if the current method of measuring from the edge of the walking surface to grade below is used.

Furthermore, the new language now requires a guardrail to be applied to any open-sided walking surface. This could very well be interpreted by building officials to include driveways, landscaped walkways, retaining walls and other elevated surfaces used for the purpose of walking. This change substantially expands the areas needing to be equipped with guards, beyond the previous edition of the code.

16

Staff Contact: Steve Orlowski - sorlowski@nahb.com 1-800-368-5242, ext. 8303

National Association of Home Builders Recommended State & Local Amendments to the 2009 International Building Code (IBC)

Issue: Guardrails

2009 IBC Section: 1013.1

Recommended Amendment:

Modify the Section as shown below (Delete text and add text)

1013.1 Where required. Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps and landings, that are located more than 30 inches ~~measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side.~~ above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7.

Reason:

The purpose of this amendment is to retain the provisions of the 2006 International Building Code (IBC), where guardrails were required when the elevation difference between the walking surface was greater than 30 inches to the floor or grade directly below. The 2009 IBC now requires a guardrail where the elevation difference is greater than 30 inches from the walking surface to a horizontal point 36 inches adjacent to the leading edge of the walking surface to the grade or floor below. This change will now require the building official to carry a four foot level to conduct inspections.

During the 2007/2008 Code Development Cycle, the proponent referred to work conducted and reports written by the International Code Council's Code Technology Committee (CTC). Though, at no time during the Public Hearing, nor the Final Action Hearing, was any technical justification presented to substantiate the change requiring the building official to measure thirty-six inches away from the leading edge of the walking surface or tread to determine when a guardrail should or should not be required. After reviewing the many reports from the CTC website, it is still unclear from where the thirty-six inch requirement was derived. Currently there are no studies that can support the claims made that this will have an effect on reducing possible injuries. While the proponent promotes this as a means for consistent enforcement of the guard requirements, there was no evidence that showed an increased risk to the safety of the occupant if the current method of measuring from the edge of the walking surface to grade below is used.

This amendment will provide both the building official and the builder with the same language that has been used consistently since the introduction of the International Residential Code.

Staff Contact: Steve Orlowski - sorlowski@nahb.com 1-800-368-5242, ext. 8303

**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Residential Code (IRC)**

Issue: Window Sill Height/Window Opening Devices

2009 IRC Section: R612.2

Recommended Amendment:

Modify the Section as shown below (Delete text, Add new text)

~~**R612.2 Window sills.** In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow a 4 inch (102mm) diameter sphere where such openings are located within 24 inches (610 mm) of the finished floor.~~

Exceptions:

- ~~1. Windows whose openings will not allow a 4 inch diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.~~
- ~~2. Openings that are provided with window fall prevention devices guards that comply with R612.3.~~
- ~~3. Openings that are provided with fall prevention devices that comply with ASTM F 2090.~~
- ~~4. Windows that are provided with opening limiting devices that comply with Section R612.4.~~

R612.3 R612.2 Window fall prevention devices. Window fall prevention devices and window guards, where provided, shall comply with the requirements of ASTM F 2090.

R612.4 R612.3 Window opening limiting devices. ~~When required elsewhere in this code~~ Where provided, window opening limiting devices shall comply with the provisions of this section.

R612.4.1 R612.3.1 General requirements. Window opening limiting devices shall be self acting and shall be positioned so as to prohibit the free passage of a 4.0-in. (102-mm) diameter rigid sphere through the window opening when the window opening limiting device is installed in accordance with the manufacturer's instructions.

Reason:

The purpose of this amendment is to retain the provision for the installation of window opening limiting devices or window fall prevention devices where they are installed, and

delete the reference of requiring these devices based on a window sill height. This change will allow the builder and the building official to use their judgment for when these devices shall be installed and insure that where these devices are provided they will conform with the referenced industry standard.

During the 2007/2008 Code Development Cycle and the International Code Council's Code Technology Committee (CTC) meetings, the Window and Door Manufacturers Association (WDMA) presented credible information that raised questions and concerns regarding the established minimum window sill heights. Despite the Consumer Product Safety Commission (CPSC) reports indicating a decrease in the number of injuries and deaths from children falling from windows, WDMA had discovered that in Denver, Colorado, one of the few areas in the country that has had a minimum sill height requirement for the past decade, the number of child injuries and deaths were increasing. One of the many concerns is that there is the potential for the occupant to place furniture or other objects under the window that a child could climb upon. It is our opinion that the CTC needs to earnestly review the information presented by the WDMA and reconsider their position on minimum window sill heights.

Furthermore, the recommendation to *require* window opening limiting devices contradicts conclusions of the CTC Work Study Group. It was clear to many in the CTC Work Group that public education was the most effective means of reducing the number of falls by children through windows.

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National Association of Home Builders Recommended State & Local Amendments to the 2009 International Residential Code (IRC)

Issue: Fire Separation Distance

2009 IRC Section: Table R302.1

Recommended Amendment:

Modify the Table as shown below (Delete text, add new text):

Table R302.1 – Exterior Walls

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	(Fire-resistance rated)	1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure to both sides	≤ 5 Feet
	(Not fire-resistance rated)	0-Hours	> 5 Feet
Projections	(Fire-resistance rated)	1-Hour on the underside	≤ 4 Feet
	(Not fire-resistance rated)	0-Hours	> 5 Feet
Openings	Not Allowed	N/A	< 3 Feet
	25% Maximum of Wall Area	0-Hours	3 Feet
	Unlimited	0-Hours	5 Feet
Penetrations	All	Comply with Section R317.3	< 5 Feet
		None Required	5 Feet

N/A = Not Applicable

Reason:

The purpose of this amendment is to retain the fire separation distances to the dimensions used in previous one- & two-family dwelling codes, and the model building codes. Without this modification, the code will have a significant impact on existing homeowners who wish to build additions or extensions to their existing property as well as limit the ability to maximize the use of smaller lots in existing communities.

During the 2004/2005 Code Development Cycle, the Code Committee disapproved this change given that the proponent failed to provide supporting evidence or data to sustain the increase in the fire separation distance. It was only by an overwhelming support from the fire service, that this change was approved during the Final Action Hearings.

To this day, there are no known reports or studies that demonstrate the previously allowed 3 foot separation distance from the property line and 6 foot separation between structures failed to provide the minimum required safe distance for fire separation. We encourage the adoption of this amendment.

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**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Building Code (IBC)**

Issue: Garage Separation

2009 IBC Section: 406.1.4

Recommended Amendment:

Modify the Section as shown below (Delete text)

406.1.4 Separation. Separations shall comply with the following:

1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than 5/8-inch Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors, or solid or honeycomb core steel doors not less than 13/8 inches (34.9 mm) thick, or doors in compliance with Section 715.3.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. ~~Doors shall be self-closing and self-latching.~~

Reason:

The purpose of this amendment is to retain the requirement for a closer on doors separating the dwelling unit from the private garage. Without this modification the code will require the builder to install devices which were not adequately justified during the 2004/2005 Code Development Cycle.

The proponent of this change failed to provide sufficient technical justification to support the need for residential door closers. No specific fire data was presented that indicated there is a problem when a door closer is not installed. Even in the case of the one fire incident which was mentioned, the door from the garage was closed at the time, not open.

Furthermore, the reason cited to support the need for the door closer was incorrect in asserting that all of the legacy building codes required a rated door. In fact, the 1999 SBCCI Standard Building Code did not require any separation whatsoever between a garage and the dwelling unit. (i.e., §411.2.6 Exception: "Separation is not required between a Group R3 and an attached garage." §504.0 Exception: "Fire resistance separation shall not be required between a dwelling and its detached private garage.")

The aspect of the door being closed by the occupant to save energy is true, but the same can be said that in order to reduce energy cost on cooling the door could be used

as a means of cross ventilation. Most people do not leave doors to unconditioned spaces open to the habitable portion of their home. On the other hand, there is no way to prevent someone from keeping the door in the open position for ventilation purposes if they so desire.

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National Association of Home Builders Recommended State & Local Amendments to the 2009 International Building Code (IBC)

Issue: Egress Width

2009 IBC Section: Section 1005.1; Table 1005.1

Recommended Amendment:

Modify the Section as shown below (Delete text and Add new text)

1005.1 Minimum required egress width. The *means of egress* width shall not be less than required by this section. The total width of *means of egress* in inches (mm) shall not be less than the total *occupant load* served by the *means of egress* multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. ~~the factors in Table 1005.1 and The width shall be not less~~ than specified elsewhere in this code. Multiple *means of egress* shall be sized such that the loss of any one *means of egress* shall not reduce the available capacity to less than 50 percent of the required capacity. The maximum capacity required from any *story* of a building shall be maintained to the termination of the *means of egress*.

**TABLE 1005.1
EGRESS WIDTH PER OCCUPANT SERVED**

OCCUPANCY	WITHOUT SPRINKLER SYSTEM		WITH SPRINKLER SYSTEM ^a	
	Stairways (inches per occupant)	Other egress components (inches per occupant)	Stairways (inches per occupant)	Other egress components (inches per occupant)
Occupancies other than those listed below	0.3	0.2	<u>0.2</u>	<u>0.15</u>
Hazardous: H-1, H-2, H-3 and H-4	Not permitted	Not permitted	<u>0.3</u>	<u>0.2</u>
Institutional: I-2	Not permitted	Not permitted	<u>0.3</u>	<u>0.2</u>

For SI: 1 inch 25.4 mm.

a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Reason:

The purpose of this amendment is to retain the allowable reduction of the means of

26

egress width in stairways and other egress components as an architectural design option in structures equipped with sprinkler system. Failure to approve this modification may bring into question all of the existing buildings where this architectural design has been permitted for over 40 years.

During the 2007/2008 Code Development Cycle it was suggested the previous allowance for reducing the required egress widths for buildings equipped with a sprinkler system should no longer be permitted. The proposal to eliminate the long standing allowance was neither substantiated by anecdotal or statistical information to warrant the deletion of the egress reductions for all occupancies equipped with sprinkler systems. Two of the three legacy codes permitted this reduction for well over 40 years for structures equipped with sprinkler systems. During that time, no documentation was presented showing these reductions failed to provide adequate egress capability. This design option should be retained.

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**National Association of Home Builders
Recommended State & Local Amendments to the
2009 International Building Code (IBC)**

Issue: Special Inspection Requirements

2009 IBC Section: 1704.1

Recommended Amendment:

Add new Exception as shown below:

1704.1 General. (No changes).

Exceptions:

1. (No change)
2. (No change)
3. (No change)
4. Special inspections are not required for structures designed and constructed in accordance with the conventional construction provisions of Section 2308.

Reason:

The purpose of this amendment is to add an exemption from third-party special inspections for portions of wood-frame dwellings or other simple wood-frame structures constructed under prescriptive provisions within the *International Building Code* (IBC). Without this amendment, a building official may require a builder to contract with a third-party inspector, with the expense passed on to the homeowner.

A change made to the IBC during the 2006-07 Code Development Cycle (S31-06/07) struck the exemption for Residential R-3 structures, and now subjects one- and two-family dwellings and townhouses designed under the IBC to the requirements for special inspections. These inspections are in addition to the standard inspections performed by the building department. Also, other structures classified as R-3 occupancies (group homes, day care) will be subject to these special inspections for all elements of their construction. As justification for the original code change, the proponent claimed R-3 structures often contain complicated roof truss systems, structural steel framing, reinforced masonry and other complex elements or unusual construction materials and methods requiring the qualifications and experience of a special inspector.

But, IBC Section 1704.1.1 exempts the registered design professional from needing to prepare, and the permit applicant from needing to submit, a statement of special inspections for structures designed and constructed per Section 2308. This clearly implies that structures built under Section 2308 do not need special inspections for any element, including the wood wall framing, roof and floor trusses, concrete or masonry foundations, and any miscellaneous masonry or steel framing inside the structure. In a

structure designed to the conventional construction provisions, these elements are not likely to be as complex as those in a fully-engineered structure.

Building departments are more than capable of reviewing and inspecting these simple structures. In the case of items such as trusses and miscellaneous steel framing that may occur in a structure otherwise designed using conventional construction provisions, shop drawings will be submitted to the building official for their review and use in inspections. The building department does not need a special inspector to do their work for them in reviewing and inspecting these structures and elements. We encourage the adoption of this amendment.

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